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Opinion Article

Decentralized Environmental Governance: A reflection on its role in shaping Wildlife Management Areas in Tanzania

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Abstract

Decentralised environmental governance has become a catchy solution to environmental problems caused by the failure of traditional centralised environmental governance. It promises to transfer power and authority, improve efficiency, equity, accountability, and inclusion of local people who were previously excluded by the command and control model. This paper examines the efficacy of decentralised environmental governance as an alternative approach to wildlife conservation in Tanzania. We analyse the policy and legal framework for Wildlife Management Areas (WMAs) in Tanzania over the past two decades as a case study on current practice and its implications. We find that despite the rhetoric of community-based conservation (CBC), the wildlife industry remains heavily under state control, while the promises of CBC remain elusive. Questioning the effectiveness of decentralised environmental governance through CBC, we recommend that actors return to the drawing board and re-negotiate their positions, interests, power and authority if meaningfully decentralised environmental governance is to be achieved.

Key Words: decentralization, governance, wildlife management areas, development, Tanzania

Résumé

La gouvernance environnementale décentralisée est devenue une solution attirante en réponse aux problèmes environnementaux liés à l'échec des approches gouvernementales centralisées et traditionnelles concernant l'environnement. Elle permet le transfert du pouvoir et d'autorisation gouvernementale, d'améliorer l'efficacité, l'équité, la responsabilité et l'inclusion des populations locales précédemment exclues par l'approche gouvernementale d'autorité et contrôle. Dans cet article, nous utilisons la gouvernance environnementale décentralisée pour examiner son efficacité comme outil de protection de la nature communautaire (PNC) en Tanzanie. En particulier, nous analysons la cadre politique et juridique des Zones de Gestion des Ressources Fauniques (ZGF) mise en œuvre en Tanzanie au cours des deux dernières décennies comme une étude de cas pour illustrer la pratique courante et les implications de cette approche. Nous constatons que malgré la rhétorique de la conservation communautaire, l'industrie de la faune reste fortement sous le contrôle de l'État, tandis que les promesses de l'approche communautaire restent douteuses. Ayant questionné l'efficacité de la gouvernance environnementale décentralisée par l'entremise de la PNC, nous conseillons que les acteurs renégocient leur positions, intérêts, pouvoir et autorité pour qu'une réelle gouvernance environnementale décentralisée puisse être atteinte.

Mots-clés: décentralisation, gouvernance, développement, Tanzanie

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Introduction

In the past three decades, there have been concerted efforts to decentralize environmental governance throughout the developing world [1, 2]. Defined as "the set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes" [3], decentralized environmental governance calls for more local participation, integration of development and conservation, and democratization [2-7]. In environmental conservation, and particularly wildlife conservation, there has been increased advocacy and investment in decentralized environmental governance worldwide in the form of community based conservation (hereafter CBC, see Note 1) [8, 9]. Drawing its popularity and legitimacy from the ineffective, exclusionary and often highly expensive nature of the state-controlled (fortress) conservation approach, CBC positions itself as a participatory form of environmental conservation. It advocates more community (see Note 2) participation in management and utilization of local resources in order to meet both development and conservation goals with minimum transaction costs [10-13].

CBC has been widely implemented in community based management of wildlife, forestry, fisheries, and water resources with varying degrees of success and failure [1, 10, 14-17]. It is viewed not only as a corrective measure to social wrongs of the past (brought about by fortress conservation), but also as an effective way to improve natural resources conservation [18]. The basis of this communal approach to conservation is that human development and wildlife conservation goals can be met if communities are allowed to manage and utilize resources in their areas of jurisdiction through mutually agreed rules.

This article provides a critical review of more than a decade of CBC in Tanzania's Wildlife Management Areas (WMAs). We focus on how CBC has shaped the way WMAs are managed in Tanzania and follow Lemos and Agrawal [3] in examining decentralized environmental governance as an alternative approach to wildlife conservation in Tanzania.

This review is important because it covers more than a decade of WMA implementation processes, and adds to the growing discourse on decentralized environmental governance. The review examines the advocacy of decentralized environmental governance as an appropriate mechanism to meet both conservation and development goals, and offers specific recommendations to the actors involved in the WMA initiative.

The article is organized into five main sections: the first introduces the CBC concept and its background to conservation. The second provides a theoretical background to decentralized environmental governance as the underpinning for CBC and its implementation in WMAs. The third section provides a brief history of wildlife conservation in Tanzania from the colonial period, highlighting the evolution of the fences and fines (fortress conservation) approach and its perceived failures. The emergence of the CBC concept follows, its suitability evidenced by the policies, laws and regulations in Tanzania. The fourth section discusses the drawbacks of the CBC in practice in Tanzania, particularly its propensity to revert back to the command and control approach. In the fifth section we provide our conclusions and implications for conservation.

1. Decentralization and natural resources governance: overview

Governance is defined as the "formal and informal institutions through which authority and power are conceived and exercised" and the "political-administrative, economic, social organization and accountability of power and authority" [1]. In this paper, institutions are defined as formal and informal rules and norms that shape interactions among individuals and with their environment-'the rules of the game' [17, 36, 67]. Following the massive institutional changes that caused the collapse of the 'welfare state' and socialist economies in the 1980s, decentralization has become the buzz word for the institutional changes on which many governments have embarked [14]. Decentralization, in theoretical terms, refers to the transfer or redistribution of power, resources, accountability and administrative capacities across different central and local government levels, in political and administrative hierarchy [1, 6, 15]. Decentralization, according to Agrawal and Ostrom [15], "has emerged as a major strategy for many countries to provide social services, achieve development objectives and undertake environmental conservation" [15]. It has become the condition for providing development aid and funding project proposals, particularly in the developing world. Since the mid-1980s, decentralized natural resources governance has gained momentum in various parts of the developing world [3, 16, 19], with recent decentralization 'language' embodying the concepts of democracy, pluralism, and rights.

1.1. Why decentralize natural resource governance?

Decentralized environmental governance aims to redistribute power, authority, resources and accountability to lower levels, in accordance with worldwide calls for decentralization to correct the inefficiencies of centralized governance mechanisms. Decentralized environmental governance is justified because first, it leads to increased efficiency at the local units by encouraging competition among the decentralized national units. Failures of the centralized governance system, particularly in the post-independence era, could be remedied by redistribution of power and authority from central to local governments most affected by the exercise of power [1, 3, 15, 16, 20, 21], thereby increasing environmental sustainability. Second, bringing decision-making closer to grassroots increases participation and accountability [3, 14, 21, 22], internalizingtransaction costs as local actors make decisions based on full knowledge of the associated costs and benefits (compared to 'outsiders' who normally would only consider their own benefits and leave the costs to the locals) and legitimizing

decisions more appropriate to local needs [3, 20]. Third, it enables decision makers to take advantage of specific temporal and spatial knowledge of the natural resources [3].

Larson and Ribot [2] further argue that the resultant efficiency, equity and inclusion should result in more sustainable management [of natural resources].This explains why decentralization should be pursued, but not why state actors, vested with such powers and authority, would actually choose to pursue decentralization [15]. Decentralization is thus not only an administrative process, but also a political process shaped by demands for change in the status quo (e.g. in managing natural resources) [1, 21]. The demands for change represent the interests of different actors in the decentralization process, from central government actors to donor agencies, international NGOs and local advocacy groups [15]. These interests in turn shape the degree, the extent, and the form of decentralization. .

In contrast to administrative decentralization (deconcentration) where powers are transferred from the central ministries to regional and local branch offices located elsewhere from the government headquarters [1, 2, 21], democratic decentralization is said to occur when decision making powers are devolved to local actors who are downwardly accountable to the people in their jurisdiction [2, 21]. It integrates local communities in the decision making process by creating more avenues for representation and have powers to make and implement decisions based on local demands [1, 2]. With the promises of increased efficiency, equity, coordination, accountability, participation, poverty reduction, and inclusion, decentralized environmental governance is widely promoted as an alternative to centralized governance by the state, which is perceived to be highly ineffective, coercive and undemocratic.

1.2. Implementing decentralized environmental governance in wildlife management

Despite its promises of more participation, democratization, accountability and devolution, decentralized environmental governance is seldom implemented in the way theories suggest. Instead, central government actors are often reluctant to redistribute power and resources to local authorities, in effect recentralizing power while decentralizing it [1, 14], particularly when the resource at stake, such as wildlife, is of high commercial value and state institutions are not transparent [21, 23-25].This is the case with the wildlife sector in Tanzania [23, 24, 26-28], where decentralized governance of Wildlife Management Areas (WMA) has received mixed reviews in more than ten years of practice . Although institutions for decentralization (policies, laws and regulations) have been in place, actual devolution of power and authority to local actors remains elusive [6, 10, 12, 25,72].

Furthermore, Goldman [29] argues that decentralization, particularly the participation rhetoric common in CBC, often view rural communities as peripheral participants, lacking the knowledge and understanding of how nature and conservation are managed and perceived [c.f.30]. This view contradicts two important assumptions of CBC: that communities have the incentives to conserve wildlife, and that communities have the knowledge and capabilities to conserve wildlife [10, 12]. Participation, according to the International Institute for Environment and Development (IIED) [31] has come to mean different things to different people. Local participation, according to Cernea [32] means empowering local people to mobilize their own resources, to be social actors rather than passive subjects, to manage the resources, to make decisions, and to control activities that affect their lives. For successful CBC initiatives, people must actively participate in making decisions that affect the resource in question and how the benefits are shared. We discuss in the following sections how the much-advocated decentralized environmental governance has led not to increased efficiency, equity and inclusion, but to notable recentralization of power and authority by the state. To understand this shift, we first explore the development of wildlife conservation in Tanzania.

2. Development of wildlife conservation in Tanzania

2.1. Pre-Colonial and during the colonial era

The move to conserve wildlife and its pristine habitat in then-Tanganyika on the American model of national parks dates back to 1891, when the German administration issued the first rules for the use of wildlife by both locals and Europeans [6, 33].Before colonialism, the use of wildlife and other resources such as forest products, fish, pasture, and agricultural land were regulated according to customary laws and regulations. This 'common property regime' was controlled by the ruling chiefs/elders, religious men, or hunting associations who controlled off take [34].

In then-Tanganyika, under German and later British colonial rule, wildlife management and use were regulated through the control of hunting (see Note 3) and the creation of protected areas known as game reserves, game controlled areas, open areas and national parks. This conservation model (in the form of protected areas) is commonly known as 'fortress conservation', likening the protected areas to a 'fortress'. It is also commonly referred to as 'command and control' or 'fines and fences' in the conservation literature [10, 35].

The fortress conservation model claims to address the problems of habitat degradation, species extinction, declining populations, encroachment, deforestation, desertification, soil erosion, and other environmental problems [3, 11, 36] and is known for strict regulations, policies and laws to restrict and prohibit human interference with biological conservation, surrendering previously communally-owned land and wildlife resources to the colonial administration. This limited locals' access to and control of the resources [33], effectively dispossessing them of their land gradually (by use of policies and laws) or actively (involving violence)[27]. The German colonial rule established Selous Game Reserve as the first game reserve in 1905, which was officially gazetted in 1921. The British followed with the establishment of the Game Department in 1921 and created the Ngorongoro Crater and Serengeti Game Reserves in 1928 and 1929, respectively.

2.2. Post-Colonial era

After independence in 1961, the Tanganyika government, like many post-colonial governments, inherited the fortress conservation model with little or no changes [3, 6, 31,33]. More national parks, game reserves and game controlled areas were created in line with socialist policies of the time, culminating in the enactment of the Wildlife Conservation Act in 1974 [33]. However, according to Nelson [6], the motivation for creation of protected areas (PAs) in Tanzania changed from the Europeans' aesthetic motives to national income contribution through tourism. Consequently, up to the 1980s, about 11 national parks and 11 game reserves were established [37]. Currently, the country boasts of 16 national parks, 28 game reserves, 44 game controlled areas, one conservation area, four Ramsar sites and 38 WMAs, representing 33.4% of Tanzania's total surface area (Table 1).

<Insert Table 1 here>

Despite the state's desire to reap economic benefits from wildlife-based tourism in the post-colonial era through the PAs, the financial and technical capacity to manage them greatly declined, largely due to failure of socialist economic policies in the 1970, corruption within state bureaucracies, the 1978-79 war with Uganda that worsened the states' economic conditions, and retirement of senior staff [3, 10, 33, 43]. In addition, elephant and rhino poaching intensified in the 1980, particularly in the Selous game reserve [10, 33]. Elephants declined from 110,000 in 1976 to just 22,000 in 1991, and the rhino population declined from 2,500 in 1976 to 50 in 1986 and 0 in 1991 [33]. This decline in elephant and rhino populations prompted the Government to launch "Operation Uhai" (Uhai is a Swahili word for Life) in 1989, involving the police, the army, and wildlife authorities in a bid to halt the problem [10]. A similar

operation, "tokomeza ujangili" (Swahili for 'eliminate poaching') was conducted in 2013 in response to the recent surge in elephant poaching. These operations require financial, technical and human resources which are often scarce within the government. Consequently, the failure of the fortress conservation approach shifted government bureaucrats, international conservation organizations, and donor agencies toward community based conservation. This gave rise to the emergence and popularity of community conservation in the past three decades [31, 33, 44, 45]. The next section provides an overview of the emergence of community wildlife management in Tanzania, with emphasis on the WMAs as a conservation enterprise embracing decentralized environmental governance through CBC.

Table 1: Categories of Protected areas, administration and land use classification with regards to wildlife use in Tanzania.

Category of PA	Number	% of total land surface	Size (Km^2)	Types of use	Human settlement allowed	Administered by
National Parks (NP)	16	6.05	57,167.50	Non-consumptive,	No	Tanzania National Parks Authority (TANAPA)
Ngorongoro Conservation Area (NCA)	1	0.88	8,292	Non-consumptive	Yes	Ngorongoro Conservation Area Authority (NCAA)
Game Reserves	28	12.15	114,782.97	Consumptive	No	Wildlife Division (WD)
Game Controlled Areas (GCAs)	44	6.12	58,565.02	Consumptive	Yes	Wildlife Division (WD)
Wildlife Management Areas (WMAs)	38	3	29,518.4	Consumptive	No	Wildlife Division, District Councils, Community Based Organizations/Authorized Associations (CBOs/AAs)
Ramsar Sites	4	5.2	48,684	Non-consumptive	No	Wildlife Division (WD)

Sources: MNRT [38], [39] ERRCG [40] TANAPA [41] [37, 42]

2.3. The emergence of Wildlife Management Areas in Tanzania.

2.3.1. Changes in Tanzania wildlife policy and regulatory framework

In response to the advocacy and investments in CBC, the Tanzanian government adopted policy and legal changes in order to implement the CBC approach. The government formulated and adopted the Wildlife Policy of Tanzania (WPT) in 1998 (revised in 2007), the Wildlife Management Areas (WMAs) regulations (2002, revised 2005, 2012) and the Wildlife Conservation Act (2009) in order to manage wildlife resources for the benefit of people [38]. To implement these reforms, the WPT called for the creation of WMAs on village lands adjacent to protected areas [38]. WMAs consist of village lands adjacent to core protected

areas used by local communities to promote conservation and generate revenues through wildlife-based enterprises such as tourist hunting and game viewing. The Wildlife Conservation Act (2009) stipulates three basic criteria for areas to be established as WMAs: (1) They must be outside core protected areas (see Note 4), (2) they must be used by local community members, and (3) they must be within the village land (Figure 1). These requirements addressed the fact that for decades, communities living adjacent to PAs had been denied direct benefits from the use of wildlife resources while at the same time, suffering the costs of wildlife conservation. The WPT, in recognition of the need to integrate conservation and development, notes that ''wildlife conservation as a form of land use has failed to adequately compete with other forms of land use, especially to the rural communities'' [38]. It urges the government to create legal, institutional and regulatory ways to allow rural communities and the private sector to benefit from the use of wildlife resources [38]. One of the explicit objectives of the WPT was to "transfer the management of WMAs to local communities thus taking care of corridors, migration routes and buffer zones *and* ensure that the local communities obtain substantial tangible (*e.g., economic and social*) benefits from wildlife conservation"[38].(*emphasis added*).

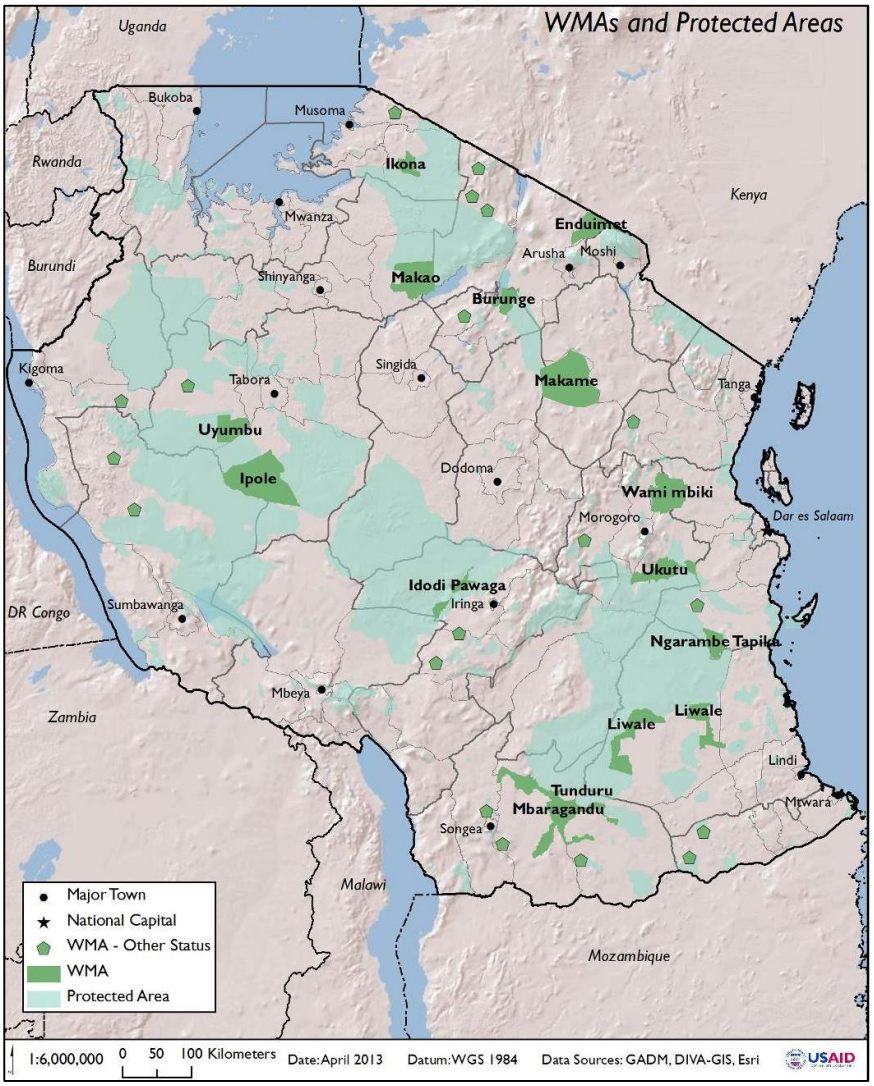

Fig. 1. Map of Tanzania showing major protected areas and WMAs. Adapted from [26].

The idea was that if communities can benefit from wildlife in their village land, they will have incentives to conserve the wildlife therein, thus promoting a win-win balance between conservation and socio-economic well-being of rural communities [8, 10, 12, 30, 45-49]. While the central government through the Wildlife Division continues to exercise overall control of wildlife in the country, these policy statements were explicit in intent to decentralize environmental governance through CBC in the context of WMAs. However, the WPT was enacted while the Wildlife Conservation Act (1974), (based on the strict fortress conservation approach) was still in operation. Consequently, a review process started and culminated in the 'new' Wildlife Conservation Act (2009) that accommodates the policy changes in wildlife conservation, particularly the creation of WMAs.

Meanwhile, the WMA regulations (2002) were issued soon after the WPT to provide the regulatory framework for the WMA concept [50]. The regulations came into formal implementation in 2003, with the establishment of 16 pilot WMAs across the country [6, 33, 50].

2.3.2. Establishing WMAs: The process and its implications to CBC

According to the WMA regulations (2012) [51], creation of a WMA requires that villagers with land that fulfils the criteria to be a WMA, agree in a village assembly to create a WMA. However, the village(s) must first establish a Community Based Organization (CBO) with a constitution, and apply for its registration through the Ministry of Home Affairs. An additional criterion requires that for an area to be designated a WMA:

> "[(i)It must have significant resources *(i.e., wildlife and its entire habitat composition)* that can be accessed, (ii)its natural resources are of significant economic values, (iii)it is ecologically viable or form part of an ecologically viable ecosystem, and (iv)it belongs to one or more villages in accordance with the relevant provisions of the law governing village land *(Village Land Act No 5, 1999, Land Act No. 4, 1999)* and other legislation relating to occupation and use of village land [51]" *emphasis added*]

When the criteria are met, the village(s) through the District Council can apply to the Director of Wildlife (hereafter the Director) for an area to be declared a WMA. The application must be accompanied by a certified copy of the minutes of the village assembly meeting approving the formation of a WMA, a duly completed information data sheet outlining the villages forming the WMA, their areas, social economic characteristics, the ecological viability and importance of the WMA (e.g., plant and animal species, unique processes etc.). Moreover, the application must be accompanied by a certified copy of the certificate of incorporation of the CBO, and a land use plan approved by the appropriate authorities [51]. The process to establish a WMA and its subsequent declaration are to be implemented simultaneously with the process to apply for an Authorized Association status, although the latter has separate requirements (see Note 5) and therefore additional technical, financial and human resources that are hardly available at the community level.

The process to establish a WMA according to the regulations has been criticized for being stringent and bureaucratic, demanding technical knowledge and understanding of district and national laws and policies that are critically lacking at the community level [25, 28, 29]. Additionally, this procedure requires significant investment of time and resources [6, 28]. In most cases, NGOs and other professional experts from outside the communities have provided the crucial financial, material and technical assistance required to get the WMA created and functioning [24, 25, 28, 29], although the interests of the NGOs and outside professionals may not be same as the communities' interests[25]. The extent of funding and technical assistance is highlighted in the World Wide Fund for Nature (WWF) status report on Tanzania's Wildlife Management Areas (2012), revealing that the United States Agency for International

Development (USAID) through WWF has awarded financial grants totaling US$ 27 Million. The main objective of these grants is to facilitate WMA implementation in Tanzania (See Note 6). These grants have been channeled through other subsidiary and international conservation NGOs such as the African Wildlife Foundation (AWF), Frankfurt Zoological Society (FZS), Wildlife Conservation Society (WCS), and WWF Tanzania country office. The USAID grants have not been limited to large conservation NGOs, but have benefited the government through the Wildlife Division as well [28].

Not surprisingly, Nelson and Agrawal [24] argue that Tanzania's CBC approach has thus far not lacked financial assistance, but the resources invested have not addressed the underlying institutional problems facing wildlife management, chiefly the perceived lack of desired outcomes, particularly from the investor's perspective. While the bureaucratic process to have a WMA and an AA established may be viewed as necessary to avoid potential conflicts and uncertainties over land use within and among villages, it has contributed significantly to the slow implementation of the decentralization reforms, and hampered realization of tangible benefits to communities. Moreover, it has not, in reality, alleviated conflicts in the WMAs, since conflicts over land use are common, with some villages withdrawing from the WMA (*e.g.,* Minjingu village, in Burunge WMA withdrew from the WMA claiming that they never gave their consent to participate in the WMA), while others are considering similar withdrawals due to the few benefits compared to the costs of protecting wildlife within their areas [25, 26].

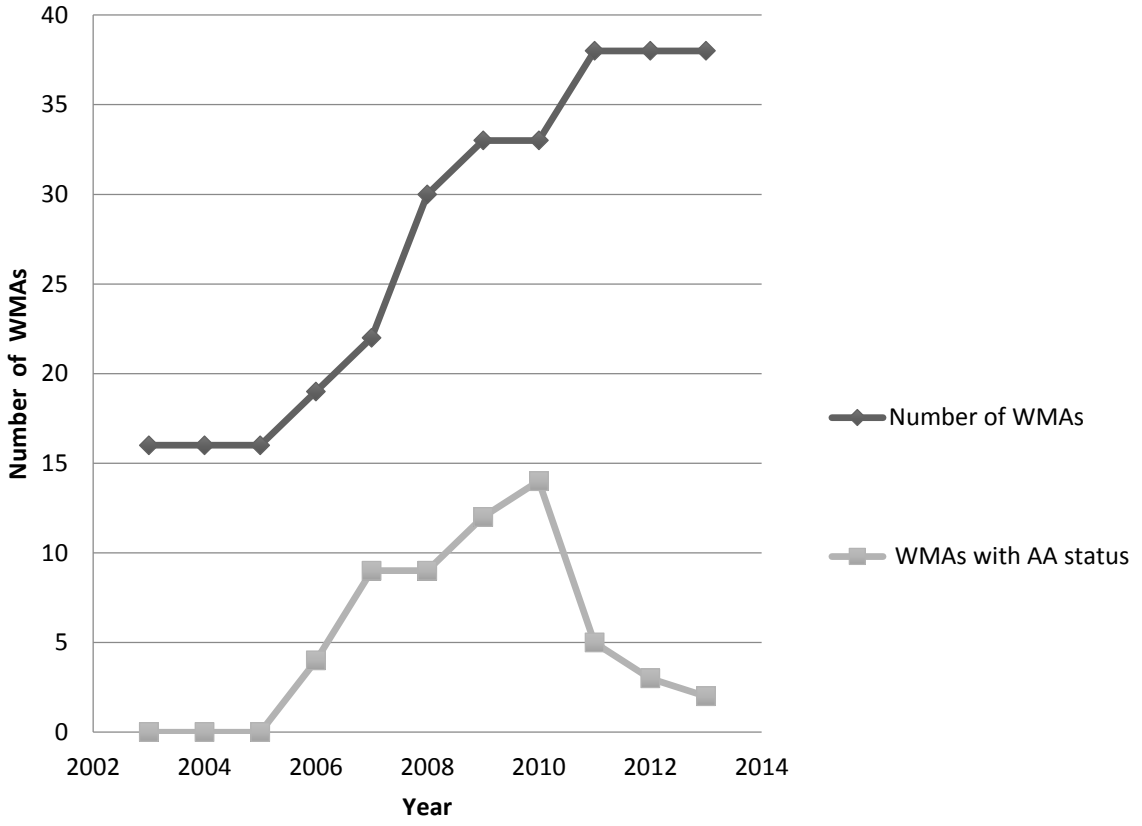

Fig.2. WMAs growth, 2002-2013. Source: Wildlife Division 2014.

Since the formal launching of the WMA regulations in 2003 (with revised editions in 2005 and 2012), about 38 WMA have been created. Of these, 17 WMAs have attained Authorized Association (AA, see Note 7) status while 21 more are in different stages of implementation [40, 52]. By 2006, only four WMAs had fulfilled the arduous conditions for gazettement (official designation as a WMA in the government *gazette*). These were Burunge, Ngarambe Tapika, Ipole and Uyumbu WMAs (Figure 2).We argue that despite legal and policy changes, results on the ground do not reflect or justify the advocacy and investments in this approach.

2.3.3. Achieving development and conservation: no win-win situation

Regarding the conservation-development compatibility issue advocated by the proponents of community conservation, we observe that decentralized environmental governance through the WMA concept benefits the conservation side more than the development side of the equation. There is no clear win-win situation realized in the CBC approach. For example, when the total area under conservation through the creation of WMAs is considered, the last 10 years of WMA regulations implementation added 28,389Km^2 of land under protection [40]. Considering Tanzania's total land area of 945,000Km^2, this area represents 3% of the total land area. However, until 1998, the total wildlife protected area network of Tanzania was 28% of the total land area, comprising 12 national parks (4%), the Ngorongoro conservation area (1%), 31 game reserves (15%) and 38 game controlled areas (8%) [38] (See Note 8). It follows that the WMAs created in village lands have significantly added to the total protected area network, a net gain to conservation in Tanzania. Moreover, the 17 established WMAs act as important buffer zones to the core protected areas, thus fulfilling the WPT objective to "promote the conservation of wildlife and its habitats outside core areas (NPs, GRs and GCAs) by creating WMAs; *and* "to transfer the management of WMAs to local communities thus *taking care of* corridors, migration routes and buffer zones…" [38] (*emphasis added*). According to USAID [26], the increased area under conservation provides long-term increased income to core protected area authorities, such as the Tanzania National Parks Authority (TANAPA), and the Wildlife Division from increased sustainability and productivity of wildlife resources through tourism and tourist hunting.

On the local development side, the WMAs have had no such impact, as the Ecosystem and Renewable Resources Consulting Group (ERRCG) [40] notes: "at present the AAs have not addressed the poverty issues at household level…even in AAs with relatively good annual income from WMAs…"[40]. For instance, in Burunge WMA, annual income from WMA related activities has been used mainly to support community-level social projects such as building of classrooms, laboratories and village government offices. In Idodi-Pawaga WMA, such income has mainly been used as sitting and travel allowances for WMA leaders to attend meetings and follow up on court cases. Failure to address poverty at the household level, particularly the provision of alternative income-generating activities that are fundamental to the livelihoods of the local people [30, 40] may erode the interest and willingness of the communities to conserve wildlife, making enemies of wildlife enemies once again [8, 10]. Furthermore, Mwakaje et.al. [48], in their analysis of income governance from the Serengeti ecosystem observe that households received an average $20.85 annual income from conservation related activities in Loliondo District (see Note 9). DeGeorges and Reilly [34], in their discussion of the shortcomings of the economics of CBNRM, note that while it is possible for some community conservation areas to generate substantial revenues from conservation, the amount at household level is insignificant. This is mainly due to the fact that first, human to resources ratio is high (as in villages surrounding Serengeti ecosystem [48]), and second, the majority of the revenue is captured by the central government through trophy hunting.

Although the government has strived to be transparent on revenue sharing from hunting concessions (see Note 10), WWF [28] notes that the transfer of funds from the government (which collects the revenues from investors in WMAs) is often delayed and lacking transparency on what is actually collected and

remitted through the benefit-sharing mechanism. Consequently, WMA operational costs such as office running costs and conducting patrols are seriously affected by this centralization of revenue collection by the government.

The broad implication of these shortcomings is that the CBC approach is not the magic formula to solve the problems arising from the failure of fortress conservation. Its implementation is plagued with a series of drawbacks which have been extensively debated throughout the community conservation discourse. It is difficult to accept the win-win situation envisaged by its proponents. We discuss in the following section some of the challenges facing CBC in Tanzania.

3. Discussion

3.1. CBC approach: Fortress conservation in disguise?

Skeptics of CBC hold that this shift in conservation paradigm (from fortress conservation to CBC) is a mere continuation of the centralized state control of wildlife resources [10, 23, 33, 35, 55]. It represents a disguised form of wildlife control by the state, in a more placatory way to reduce opposition and conflicts with rural communities caused by active command and control approaches [8, 10, 30, 53-55]. For example, the WPT explicitly state that:

> ["In recognition of the importance of conservation of biological diversity to the livelihood of mankind, the state *will retain the overall ownership of wildlife*… The government will access user rights to various stakeholders to access wildlife and wetland resources, in order to ensure that national priorities are addressed and abuses controlled" [39] [*emphasis added*]

This policy statement confirms that the CBC approach is an extension of the fortress conservation approach [10, 29, 30, 55], belying the good intentions of enabling the rural communities and the private sector to participate and benefit from the use of wildlife through creation of WMAs [38, 39]. On the other hand, the policy and regulatory changes necessary for the new conservation approach are often shaped by the elite state and non-state conservationists with little or no participation by the communities. The resulting governance structures often circumscribe the participatory rights and interests of the local people that the policy and regulatory changes claim to address in the first place. The power and interest of the elites in government and non-governmental organizations to maintain their control over wildlife are thereby safeguarded [24].

For instance, the lucrative tourist hunting business in Tanzania is controlled by the state through the Director of Wildlife [24, 25]. In hunting blocks falling within WMAs the revenue is first centrally collected and later appropriated to the respective WMA in accordance with the benefit sharing mechanism [51]. It has been argued that the new policies and laws of community conservation in Tanzania have actually led to recentralization of power and authority to the state [39, 51, 56] and that the CBC approach to WMAs amounts to coercion [23]. At the WMA level, conflicts of interest and corruption allegations are common within the WMA leadership structure. For instance, in Idodi-Pawaga WMA, the elite's interests in lucrative hunting blocks have caused internal conflicts within the WMA Advisory Board, prompting the WMA participating villages, through the District Commissioner, to dissolve it. More recently, members of the WMA Executive Committee have been dismissed for mishandling investment contracts and for alleged corruption. Conflicts of interest between WMA leaders and investors have led to court cases with significant financial losses to the WMA [See Note 11].

Meanwhile, Igoe and Croucher [25] suggest that Tanzania's transition to neo-liberal governance models has contextualized the way in which WMAs have been created and operated through *reregulation*. Reregulation is the use of the state to commodify previously non-tradable resources that were previously not owned, state owned, or community owned [25]. In the WMA plan, this is achieved by granting

collective legal titles to the participating villages, which thereby become partners in business ventures [25]. This explains the need for village land titles, land use plans, and clearly marked boundaries, among other requirements in the application for a WMA. Neumann [57] indicates that the partitioning of space (as in land use plans) subtly achieves population control near protected areas, reducing the use of force and coercion. This is a clear commodification of wildlife resources outside core protected areas by the state through reregulation, forcing local people to exclude themselves from their own land [25, 57]. The outcome of recentralization and reregulation has been resistance by the communities to accept the WMA approach in some areas [23, 25, 58, see Note 12].

3.2. Devolution of Power and authority

The wildlife sector in Tanzania (and elsewhere in Africa) is a lucrative industry with great commercial value [24]. For instance, the tourism sector, which is largely wildlife-based, contributed about 17.5% of the national GDP in 2012 [48]. For this reason, various reforms in the wildlife sector since the colonial era have centralized power and authority in shaping the decisions and rules about wildlife. Although the definition of power is often contested, it can generally be used to mean the ability of one party to gain the compliance of the other; in other words, the ability of A to make B do what B would otherwise not do [59, 60]. In CBC, power refers to ability to make decisions about how resources are used, to create rules or modify old ones, and to ensure compliance with them [61]. The passive and active devolution of power and authority in the wildlife sector in Tanzania and elsewhere in Africa demonstrated the state's interest in maintaining control over wildlife, limiting communities' ability to benefit from the wildlife industry. In the WMA implementation process, manifestations of power are apparent in the state's maintenance of overall ownership of wildlife [38, 39] and lack of transparency in benefit sharing, particularly income from both consumptive and non-consumptive use [28, 40]. This has led to patronage and rent-seeking behavior by state officials, perpetuating the centralized control over wildlife [23, 24]. The new Wildlife Conservation Act (2009) virtually reverted to and even expanded the hegemonic control of regulatory and management framework by the state [62]. Notwithstanding the decentralized environmental governance rhetoric over the last three decades, there is little evidence to suggest that the central government has actually devolved power and authority to the communities.

In addition, Murphree [63] attributes the failure of the CBC approach to the inability to democratically decentralize and devolve power and resources to those in need. He notes that those with the power to devolve power and control of resources to local communities have a *strong interest* in resisting these changes, while those with objective interest in such changes have neither the power nor the resources to effect them [64]. Thus, power and desired changes pull in opposite directions, resulting in underperformance of many CBC projects, as is the case with WMAs in Tanzania. We therefore suggest that the opposing ends between power and desired changes be carefully negotiated to obtain a level playing field. As Adams and Hulme [8] argue, these conflicting interests could be re-negotiated and reconciled, but only if the state agency is flexible and willing to deviate from its pre-determined conservation goals.

3.3. Can communities be trusted?

Another observation of CBC underperformance relates to *trust*. We contend that communities are knowledgeable actors in conservation, with longer histories and interactions with wildlife than the state. However, in practice, communities are often ignored and their rich indigenous knowledge not acknowledged in the promulgation of various programs. Although communities are presumed capable of designing their own rules and regulations for sustainable management and use of common property [34, 65, 72], the state assumes that communities cannot safeguard the sustainable management and use of

resources. For example, the Wildlife Conservation Act (2009) states explicitly that "the Minister (*responsible for wildlife*) shall, in consultation with the Minister responsible for local government authorities prepare *model by-laws* to be *adopted* with such necessary changes by the village authorities which shall apply in the respective Wildlife Management Area" [56][*emphasis added*]. According to the Act, the Minister, in making such regulations, is supposed to ensure that the communities are properly *consulted* and *informed* on how such communities shall benefit from WMAs. Yet participation by consultation, according to IIED [31] implies that the state agency defines both the problem and the solution, with no guarantee that local people's views will be considered. To this end, we make two observations; first is the state's lack of trust in existing local institutions to govern resources, and second, the passive participation by communities in crafting institutions that would eventually affect their resources use and management. The former represent a potential conflict between the state's pre-determined conservation goals and community well-being, since in many cases, as Berkes [66] argues, most local institutions are about allocation, use and conflict management rather than conservation *per se*.

Undoubtedly, control of natural resources by the state agency has led to coercive policies, laws, and regulations to control access and use of natural resources, including wildlife, with little regard for the needs and interests of the locals. While the premises for successful CBC projects and Common Pool Resources (CPR) [8, 13, 15, 63, 65, 67, 68] are presumably well known to the actors in the decentralization process, they have been largely ignored to protect and sustain the interest of one party (the state) at the expense of the locals [23, 24, 62, 72]. As a result, this conservation model has largely failed to ensure sustainable conservation of wildlife resources or to make institutional changes that acknowledge the importance of the communities [10].

Communities at the local levels could be given opportunities to design and craft their own institutions for managing wildlife and other resources. This, of course, has to take into account the diversity of CPRs [69] and issues of scale and location. Albeit crafting local institutions for managing mobile, renewable/biological resources (such as wildlife) appears to be a complex task [68], but community decision-making is an important design principle for the sustainability of such common pool resources [65, 68].

3.4. Linking conservation and development: importance of trade-offs

It has been argued that linking conservation and development will not serve any objective and therefore they should be de-linked [11, 70]. Various misunderstandings of the trade-offs between conservation and development have emerged over the last three decades. For example, McShane et al. [30] argue that ineffective communication about the real trade-offs between conservation and development has fueled criticism of CBC. Failure to recognize and acknowledge the trade-offs between conservation and development implies that the win-win rhetoric of integrated development and conservation projects has failed massively to deliver either of the intended objectives. This has led to a reversion to the fortress conservation approach, based on the moral imperative to protect biodiversity in strictly 'people free parks' [71]. This is because human-induced biodiversity loss continues at an alarming rate: human beings, as natural creatures, tend to improve their wellbeing to the detriment of nature [30, 71], as in the resurgence of elephant poaching in Tanzania, and thus, "dire circumstances require extreme measures" [71]. However, this paradigm shift has been criticized for its lack of attention to the political and social processes that shape conservation practices in many parts of the world [11, 71].

4. Conclusions and implications for conservation

The wildlife sector in Tanzania has undergone significant policy and legal changes in management and use before, during, and after the colonial period. Despite these changes, the command and control conservation model continues to manifest not only in the protection of core protected areas, but also in the supposed community conservation areas (WMAs). Local communities, supposedly the custodians and immediate beneficiaries of wildlife, continue to be peripheral spectators.

Decentralized environmental governance, particularly democratic decentralization, promises: (i) to transfer power and authority to local levels, (ii) to bring decision-making closer to the people, thus increasing participation and accountability, and (iii) to allow decision makers to make decisions based on local knowledge of the natural resources [3]. Our analysis indicates that none of these promises have been or can be fully attained, given the current practice on the ground that recentralizes power and resources by the state. Efficiency, equity, and inclusion in WMAs remain elusive, which seriously erodes their sustainability over time. The arduous process of establishing a WMA, conflicts over land use and benefit sharing mechanisms, and the inability to understand, communicate and appreciate the trade-offs between conservation and development are shortcomings not only in the implementation per se but also in the very theoretical premises of the CBC approach. The near-absence of community participation, the lack of trust in communities to manage their own resources, and the high costs incurred by communities adjacent to protected areas point to the ineffectiveness of the decentralized CBC as an alternative to the fortress conservation approach. Although decentralized environmental governance as a political process has not entirely failed, it has largely failed to achieve its intended results. Efforts to redress its failures must start from the drawing board, carefully renegotiating positions, interests, power and authority regarding wildlife management.

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Notes

Note 1 Also known as Community Wildlife Management (CWM), Community Based Natural Resources Management (CBNRM), and Participatory Forest Management (PFM)

Note 2 Although defining a community poses some significant challenges regarding space, scale, use, and interest, "community' in the CBC context can be functionally defined as the "profiles of interactions required for people to organise themselves for effective common pool resource management at levels below and beyond the effective reach of state bureaucratic management," see [45].

Note 3 According to Nelson et al [6] the first hunting regulations were issued in 1891 to control the declining wildlife populations, particularly elephants, whose numbers had dwindled following years of exploitation by the commercial ivory trade.

Note 4 Core Protected Areas according to the Wildlife Conservation Act include National Parks, Game Reserves, Wetland Reserve, the Ngorongoro Conservation Area, and any other protected area declared under the WCA (2009) or any other written law.

Note 5 Such additional requirements include a boundary description of the proposed WMA, its size, name, and a sketch map, and a Resource Management Zone Plan which serves as an interim plan pending the preparation of a General Management Plan.

Note 6 These grants have funded an array of activities related to WMA implementation, ranging from supporting infrastructure (USAID cash for work program) to capacity building, project outreach and project development.

Note 7 According to the Wildlife Conservation (Wildlife Management Areas) regulations 2012, an Authorised Association is a community-based organisation whose primary objective is to conserve wildlife resources for the benefit of the community members ordinarily residing in that particular area. An AA status is a stage where an AA has applied and successfully secured user rights to manage and utilise wildlife resources in accordance with the WMA regulations.

Note 8 The number of National Parks has increased to 16, while some of the Game Controlled Areas have been de-gazetted into village lands to allow for creation of WMAs

Note 9 Calculations based on $213,000 accrued from conservation in 2009, assuming 50% of the income goes to 5105 households in Loliondo district.

Note 10 The revised WMA regulations (2012) give mandate to Authorized Associations (AAs) to negotiate and appoint a tourist hunting company in a WMA with a hunting block, but only after the Director's advice.

Note 11 Information Based on field interviews with key informants in Idodi-Pawaga WMA

Note 12 Examples include Twatwatwa WMA, (Kilosa, started 2003) Loliondo WMA (Ngorongoro, started 2003). Some villages within WMAs are threatening to withdraw such as Minjingu village in Burunge WMA, Babati.